

NONCLOGGING STATIC MIXER

ABSTRACT OF THE DISCLOSURE

In one embodiment, a mixing apparatus for mixing a flowable material comprises a first body having a first mating surface and a plurality of first cavities formed on the first mating surface. The plurality of first cavities are arranged along a first path to provide a variation in depth measured from the first mating surface. A second body has a second mating surface configured to mate with the first mating surface of the first body. The second body includes a plurality of second cavities formed on the second mating surface. The plurality of second cavities are arranged along a second path to provide a variation in depth measured from the second mating surface. The first mating surface of the first body is mated with the second mating surface of the second body to align the first path with the second path. The first cavities fluidically communicates with the second cavities to form an internal flow path from an inlet through the first cavities and second cavities to an outlet. The internal flow path has multiple depth turns to direct flow between the first body and the second body formed by the depth variations in the first cavities of the first body and the second cavities in the second body.

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